

Johannes A Lercher

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586
papers

28,186
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82
h-index

134
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633
ext. papers

31,230
ext. citations

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avg, IF

7.38
L-index

#	Paper	IF	Citations
586	Highly selective catalytic conversion of phenolic bio-oil to alkanes. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 3987-90	16.4	529
585	Single-site trinuclear copper oxygen clusters in mordenite for selective conversion of methane to methanol. <i>Nature Communications</i> , 2015 , 6, 7546	17.4	485
584	Aqueous-phase hydrodeoxygenation of bio-derived phenols to cycloalkanes. <i>Journal of Catalysis</i> , 2011 , 280, 8-16	7.3	426
583	Towards quantitative catalytic lignin depolymerization. <i>Chemistry - A European Journal</i> , 2011 , 17, 5939-48	11.8	406
582	Infrared studies of the surface acidity of oxides and zeolites using adsorbed probe molecules. <i>Catalysis Today</i> , 1996 , 27, 353-376	5.3	404
581	Ni-catalyzed cleavage of aryl ethers in the aqueous phase. <i>Journal of the American Chemical Society</i> , 2012 , 134, 20768-75	16.4	348
580	Coordination modulation induced synthesis of nanoscale Eu(1-x)Tb(x)-metal-organic frameworks for luminescent thin films. <i>Advanced Materials</i> , 2010 , 22, 4190-2	24	287
579	Oxidative Dehydrogenation of Ethane: Common Principles and Mechanistic Aspects. <i>ChemCatChem</i> , 2013 , 5, 3196-3217	5.2	284
578	Catalytic deoxygenation of microalgae oil to green hydrocarbons. <i>Green Chemistry</i> , 2013 , 15, 1720	10	258
577	Stabilizing catalytic pathways via redundancy: selective reduction of microalgae oil to alkanes. <i>Journal of the American Chemical Society</i> , 2012 , 134, 9400-5	16.4	256
576	Monomolecular Conversion of Light Alkanes over H-ZSM-5. <i>Journal of Catalysis</i> , 1995 , 157, 388-395	7.3	251
575	Selective Hydrodeoxygenation of Lignin-Derived Phenolic Monomers and Dimers to Cycloalkanes on Pd/C and HZSM-5 Catalysts. <i>ChemCatChem</i> , 2012 , 4, 64-68	5.2	249
574	Structure Sensitivity of the Hydrogenation of Crotonaldehyde over Pt/SiO ₂ and Pt/TiO ₂ . <i>Journal of Catalysis</i> , 1997 , 166, 25-35	7.3	246
573	Upgrading pyrolysis oil over Ni/HZSM-5 by cascade reactions. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 5935-40	16.4	244
572	Towards quantitative conversion of microalgae oil to diesel-range alkanes with bifunctional catalysts. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 2072-5	16.4	240
571	Towards understanding the bifunctional hydrodeoxygenation and aqueous phase reforming of glycerol. <i>Journal of Catalysis</i> , 2010 , 269, 411-420	7.3	240
570	Sintering-Resistant Single-Site Nickel Catalyst Supported by Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2016 , 138, 1977-82	16.4	233

569	Coke formation and deactivation pathways on H-ZSM-5 in the conversion of methanol to olefins. <i>Journal of Catalysis</i> , 2015 , 325, 48-59	7.3	230
568	Hydrodeoxygenation of bio-derived phenols to hydrocarbons using RANEY Ni and Nafion/SiO ₂ catalysts. <i>Chemical Communications</i> , 2010 , 46, 412-4	5.8	229
567	Elementary steps of NO _x adsorption and surface reaction on a commercial storage reduction catalyst. <i>Journal of Catalysis</i> , 2003 , 214, 308-316	7.3	226
566	Mono and Bifunctional Pathways of CO ₂ /CH ₄ Reforming over Pt and Rh Based Catalysts. <i>Journal of Catalysis</i> , 1998 , 176, 93-101	7.3	222
565	Brønsted Acid Site and Pore Controlled Siting of Alkane Sorption in Acidic Molecular Sieves. <i>Journal of Physical Chemistry B</i> , 1997 , 101, 5414-5419	3.4	218
564	Stability of Zeolites in Hot Liquid Water. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 19582-19595	3.8	207
563	Adsorption of water on ZSM 5 zeolites. <i>The Journal of Physical Chemistry</i> , 1989 , 93, 4837-4843		207
562	Methane Oxidation to Methanol Catalyzed by Cu-Oxo Clusters Stabilized in NU-1000 Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2017 , 139, 10294-10301	16.4	203
561	Alkane sorption in molecular sieves: The contribution of ordering, intermolecular interactions, and sorption on Brønsted acid sites. <i>Zeolites</i> , 1997 , 18, 75-81		201
560	The State of Zirconia Supported Platinum Catalysts for CO ₂ /CH ₄ Reforming. <i>Journal of Catalysis</i> , 1997 , 171, 279-286	7.3	197
559	Influence of Surface Modification on the Acid Site Distribution of HZSM-5. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 9552-9558	3.4	194
558	Compensation Phenomena in Heterogeneous Catalysis: General Principles and a Possible Explanation. <i>Catalysis Reviews - Science and Engineering</i> , 2000 , 42, 323-383	12.6	192
557	First-principles study of phenol hydrogenation on Pt and Ni catalysts in aqueous phase. <i>Journal of the American Chemical Society</i> , 2014 , 136, 10287-98	16.4	188
556	Selective catalytic hydroalkylation and deoxygenation of substituted phenols to bicycloalkanes. <i>Journal of Catalysis</i> , 2012 , 288, 92-103	7.3	187
555	Hydrogen Transfer Pathways during Zeolite Catalyzed Methanol Conversion to Hydrocarbons. <i>Journal of the American Chemical Society</i> , 2016 , 138, 15994-16003	16.4	186
554	On reaction pathways in the conversion of methanol to hydrocarbons on HZSM-5. <i>Journal of Catalysis</i> , 2014 , 317, 185-197	7.3	180
553	Comparison of kinetics, activity and stability of Ni/HZSM-5 and Ni/Al ₂ O ₃ -HZSM-5 for phenol hydrodeoxygenation. <i>Journal of Catalysis</i> , 2012 , 296, 12-23	7.3	178
552	Adsorption complexes of methanol on zeolite ZSM-5. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1990 , 86, 3039		175

551	Synergistic effects of Ni and acid sites for hydrogenation and C-D bond cleavage of substituted phenols. <i>Green Chemistry</i> , 2015 , 17, 1204-1218	10	174
550	Stability and reactivity of copper oxo-clusters in ZSM-5 zeolite for selective methane oxidation to methanol. <i>Journal of Catalysis</i> , 2016 , 338, 305-312	7.3	174
549	On the Role of the Pore Size and Tortuosity for Sorption of Alkanes in Molecular Sieves. <i>Journal of Physical Chemistry B</i> , 1997 , 101, 1273-1278	3.4	168
548	Manipulating catalytic pathways: deoxygenation of palmitic acid on multifunctional catalysts. <i>Chemistry - A European Journal</i> , 2013 , 19, 4732-41	4.8	165
547	Adsorption of C ₂ -C ₈ n-Alkanes in Zeolites. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 1204-1219	3.8	165
546	Carbon Deposition during Carbon Dioxide Reforming of Methane—Comparison between Pt/Al ₂ O ₃ and Pt/ZrO ₂ . <i>Journal of Catalysis</i> , 2001 , 197, 34-42	7.3	161
545	Transport and Isomerization of Xylenes over HZSM-5 Zeolites. <i>Journal of Catalysis</i> , 1993 , 139, 24-33	7.3	155
544	Methyl chloride production from methane over lanthanum-based catalysts. <i>Journal of the American Chemical Society</i> , 2007 , 129, 2569-76	16.4	151
543	Quantitatively probing the Al distribution in zeolites. <i>Journal of the American Chemical Society</i> , 2014 , 136, 8296-306	16.4	146
542	Deactivation and Coke Accumulation during CO ₂ /CH ₄ Reforming over Pt Catalysts. <i>Journal of Catalysis</i> , 1999 , 183, 336-343	7.3	141
541	Tunable Water and CO ₂ Sorption Properties in Isostructural Azine-Based Covalent Organic Frameworks through Polarity Engineering. <i>Chemistry of Materials</i> , 2015 , 27, 7874-7881	9.6	136
540	Impact of solvent for individual steps of phenol hydrodeoxygenation with Pd/C and HZSM-5 as catalysts. <i>Journal of Catalysis</i> , 2014 , 309, 362-375	7.3	136
539	Dealumination of HZSM-5 via steam-treatment. <i>Microporous and Mesoporous Materials</i> , 2012 , 164, 9-20	5.3	134
538	Synthesis, characterization and catalytic activity of the pillared molecular sieve MCM-36. <i>Microporous and Mesoporous Materials</i> , 1998 , 25, 207-224	5.3	134
537	Design of stable catalysts for methane-carbon dioxide reforming. <i>Studies in Surface Science and Catalysis</i> , 1996 , 101, 463-472	1.8	134
536	Impact of the local environment of Brønsted acid sites in ZSM-5 on the catalytic activity in n-pentane cracking. <i>Journal of Catalysis</i> , 2014 , 316, 93-102	7.3	132
535	Lewis-Brønsted Acid Pairs in Ga/H-ZSM-5 To Catalyze Dehydrogenation of Light Alkanes. <i>Journal of the American Chemical Society</i> , 2018 , 140, 4849-4859	16.4	131
534	Effects of the Support on the Performance and Promotion of (Ni)MoS ₂ Catalysts for Simultaneous Hydrodenitrogenation and Hydrodesulfurization. <i>ACS Catalysis</i> , 2014 , 4, 1487-1499	13.1	131

533	Steaming of Zeolite BEA and Its Effect on Acidity: A Comparative NMR and IR Spectroscopic Study. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 8005-8013	3.8	131
532	On the mechanism of catalyzed isobutane/butene alkylation by zeolites. <i>Journal of Catalysis</i> , 2004 , 224, 80-93	7.3	124
531	Preparation of Barium Titanates from Oxalates. <i>Journal of the American Ceramic Society</i> , 1993 , 76, 1185-1190	3.8	116
530	Upgrading Pyrolysis Oil over Ni/HZSM-5 by Cascade Reactions. <i>Angewandte Chemie</i> , 2012 , 124, 6037-6042	3.6	114
529	Formation Mechanism of the First Carbon-Carbon Bond and the First Olefin in the Methanol Conversion into Hydrocarbons. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 5723-6	16.4	113
528	On the impact of co-feeding aromatics and olefins for the methanol-to-olefins reaction on HZSM-5. <i>Journal of Catalysis</i> , 2014 , 314, 21-31	7.3	113
527	Importance of size and distribution of Ni nanoparticles for the hydrodeoxygenation of microalgae oil. <i>Chemistry - A European Journal</i> , 2013 , 19, 9833-42	4.8	113
526	Surface Acidity and Basicity of La ₂ O ₃ , LaOCl, and LaCl ₃ Characterized by IR Spectroscopy, TPD, and DFT Calculations. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 15770-15781	3.4	110
525	Determination of proton affinity of zeolites and zeolite-like solids by low-temperature adsorption of carbon monoxide. <i>Zeolites</i> , 1989 , 9, 539-543		110
524	Determining the location and nearest neighbours of aluminium in zeolites with atom probe tomography. <i>Nature Communications</i> , 2015 , 6, 7589	17.4	108
523	Generation and Characterization of Well-Defined Zn ²⁺ Lewis Acid Sites in Ion Exchanged Zeolite BEA. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 4116-4126	3.4	108
522	Controlled decrease of acid strength by orthophosphoric acid on ZSM5. <i>Applied Catalysis</i> , 1986 , 25, 215-222		103
521	Dehydrogenation of Light Alkanes over Zeolites. <i>Journal of Catalysis</i> , 1997 , 172, 127-136	7.3	102
520	Accurate Adsorption Thermodynamics of Small Alkanes in Zeolites. Ab initio Theory and Experiment for H-Chabazite. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 6128-6137	3.8	99
519	Methane autothermal reforming with and without ethane over mono- and bimetal catalysts prepared from hydrotalcite precursors. <i>Journal of Catalysis</i> , 2005 , 229, 185-196	7.3	97
518	Studies on the deactivation of NO _x storage-reduction catalysts by sulfur dioxide. <i>Catalysis Today</i> , 2002 , 75, 413-419	5.3	95
517	Adsorption and surface reactions of thiophene on ZSM 5 zeolites. <i>The Journal of Physical Chemistry</i> , 1992 , 96, 2669-2675		95
516	Aqueous Phase Hydroalkylation and Hydrodeoxygenation of Phenol by Dual Functional Catalysts Comprised of Pd/C and H/La-BEA. <i>ACS Catalysis</i> , 2012 , 2, 2714-2723	13.1	94

515	Mechanisms of catalytic cleavage of benzyl phenyl ether in aqueous and apolar phases. <i>Journal of Catalysis</i> , 2014 , 311, 41-51	7.3	92
514	Carbonium ion formation in zeolite catalysis. <i>Catalysis Letters</i> , 1994 , 27, 91-96	2.8	92
513	Mechanisms of selective cleavage of C-O bonds in di-aryl ethers in aqueous phase. <i>Journal of Catalysis</i> , 2014 , 309, 280-290	7.3	91
512	Mechanism and Kinetics of CO ₂ Adsorption on Surface Bonded Amines. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 4126-4135	3.8	91
511	A New Type of Low- ϵ Dielectric Films Based on Polysilsesquioxanes. <i>Advanced Materials</i> , 2002 , 14, 1369-1373	11.4	88
510	Common mechanistic aspects of liquid and solid acid catalyzed alkylation of isobutane with n-butene. <i>Journal of Catalysis</i> , 2003 , 216, 313-323	7.3	88
509	An Explanation for the Enhanced Activity for Light Alkane Conversion in Mildly Steam Dealuminated Mordenite: The Dominant Role of Adsorption. <i>Journal of Catalysis</i> , 2001 , 202, 129-140	7.3	87
508	Enhancement of sorption processes in the zeolite H-ZSM5 by postsynthetic surface modification. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 533-8	16.4	86
507	Alkylation of Toluene over Basic Catalysts: Key Requirements for Side Chain Alkylation. <i>Journal of Catalysis</i> , 1998 , 180, 56-65	7.3	86
506	Xylene isomerization with surface-modified HZSM-5 zeolite catalysts: An in situ IR study. <i>Journal of Catalysis</i> , 2006 , 241, 304-311	7.3	83
505	Dehydration Pathways of 1-Propanol on HZSM-5 in the Presence and Absence of Water. <i>Journal of the American Chemical Society</i> , 2015 , 137, 15781-94	16.4	80
504	Towards Quantitative Conversion of Microalgae Oil to Diesel-Range Alkanes with Bifunctional Catalysts. <i>Angewandte Chemie</i> , 2012 , 124, 2114-2117	3.6	78
503	Selective reduction of NO to N ₂ in the presence of oxygen over supported silver catalysts. <i>Applied Catalysis B: Environmental</i> , 2002 , 37, 205-216	21.8	78
502	Oxidative dehydrogenation of propane over niobia supported vanadium oxide catalysts. <i>Catalysis Today</i> , 1996 , 28, 139-145	5.3	78
501	Hydrogenation of benzaldehyde via electrocatalysis and thermal catalysis on carbon-supported metals. <i>Journal of Catalysis</i> , 2018 , 359, 68-75	7.3	77
500	Oxidative activation of n-butane on sulfated zirconia. <i>Journal of the American Chemical Society</i> , 2005 , 127, 16159-66	16.4	77
499	The role of the oxidic support on the deactivation of Pt catalysts during the CO ₂ reforming of methane. <i>Catalysis Today</i> , 1996 , 29, 349-353	5.3	77
498	Selective Alkylation of Toluene over Basic Zeolites: An In Situ Infrared Spectroscopic Investigation. <i>Journal of Catalysis</i> , 1997 , 168, 442-449	7.3	76

497	The synergistic effect between Ni sites and Ni-Fe alloy sites on hydrodeoxygenation of lignin-derived phenols. <i>Applied Catalysis B: Environmental</i> , 2019 , 253, 348-358	21.8	75
496	Heterogeneous catalysts for hydroamination reactions: structure-activity relationship. <i>Journal of Catalysis</i> , 2004 , 221, 302-312	7.3	75
495	Oxidative conversion of propane over lithium-promoted magnesia catalyst I. Kinetics and mechanism. <i>Journal of Catalysis</i> , 2003 , 218, 296-306	7.3	75
494	Effect of Brønsted and Lewis sites in ferrierites on skeletal isomerization of n-butenes. <i>Applied Catalysis A: General</i> , 1999 , 182, 297-308	5.1	75
493	Genesis and Stability of Hydronium Ions in Zeolite Channels. <i>Journal of the American Chemical Society</i> , 2019 , 141, 3444-3455	16.4	74
492	Infrared Microscopic Study of Sorption and Diffusion of Toluene in ZSM-5. <i>The Journal of Physical Chemistry</i> , 1994 , 98, 7436-7439		74
491	Reductive deconstruction of organosolv lignin catalyzed by zeolite supported nickel nanoparticles. <i>Green Chemistry</i> , 2015 , 17, 5079-5090	10	73
490	Role of Amine Functionality for CO ₂ Chemisorption on Silica. <i>Journal of Physical Chemistry B</i> , 2016 , 120, 1988-95	3.4	73
489	Comparison of kinetics and reaction pathways for hydrodeoxygenation of C ₃ alcohols on Pt/Al ₂ O ₃ . <i>Catalysis Today</i> , 2012 , 183, 3-9	5.3	73
488	Hydrogenation of crotonaldehyde over Pt based bimetallic catalysts. <i>Journal of Molecular Catalysis A</i> , 1997 , 121, 69-80		73
487	Acid-Base properties of alumina-magnesia mixed oxides. Part 4. Infrared study of adsorption of carbon dioxide. <i>Journal of the Chemical Society Faraday Transactions I</i> , 1984 , 80, 949		73
486	Aqueous phase electrocatalysis and thermal catalysis for the hydrogenation of phenol at mild conditions. <i>Applied Catalysis B: Environmental</i> , 2016 , 182, 236-246	21.8	72
485	Influence of alkali carbonates on benzyl phenyl ether cleavage pathways in superheated water. <i>Applied Catalysis B: Environmental</i> , 2010 , 95, 71-77	21.8	72
484	Catalytic properties of postsynthesis phosphorus-modified H-ZSM5 zeolites. <i>Journal of Catalysis</i> , 1989 , 115, 291-300	7.3	72
483	Nature and Location of Cationic Lanthanum Species in High Alumina Containing Faujasite Type Zeolites. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 21763-21776	3.8	71
482	n-Butane Isomerization over Acidic Mordenite. <i>Journal of Catalysis</i> , 1995 , 155, 376-382	7.3	71
481	Decisive role of transport rate of products for zeolite para-selectivity: Effect of coke deposition and external surface silylation on activity and selectivity of HZSM-5 in alkylation of toluene. <i>Zeolites</i> , 1996 , 17, 265-271		70
480	Sinter-Resistant Platinum Catalyst Supported by Metal-Organic Framework. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 909-913	16.4	70

479	Impact of the oxygen defects and the hydrogen concentration on the surface of tetragonal and monoclinic ZrO ₂ on the reduction rates of stearic acid on Ni/ZrO ₂ . <i>Chemistry - A European Journal</i> , 2015 , 21, 2423-34	4.8	69
478	On the coke deposition in dry reforming of methane at elevated pressures. <i>Applied Catalysis A: General</i> , 2015 , 504, 599-607	5.1	68
477	Enhancing the catalytic activity of hydronium ions through constrained environments. <i>Nature Communications</i> , 2017 , 8, 14113	17.4	66
476	Selective Methane Oxidation to Methanol on Cu-Oxo Dimers Stabilized by Zirconia Nodes of an NU-1000 Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2019 , 141, 9292-9304	16.4	66
475	Palladium-Catalyzed Hydrolytic Cleavage of Aromatic C-O Bonds. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 2110-2114	16.4	65
474	Deactivation pathways in zeolite-catalyzed isobutane/butene alkylation. <i>Journal of Catalysis</i> , 2003 , 220, 192-206	7.3	65
473	An in situ IR study of the NO _x adsorption/reduction mechanism on modified Y zeolites. <i>Physical Chemistry Chemical Physics</i> , 2003 , 5, 1897-1905	3.6	65
472	Bridging Zirconia Nodes within a Metal-Organic Framework via Catalytic Ni-Hydroxo Clusters to Form Heterobimetallic Nanowires. <i>Journal of the American Chemical Society</i> , 2017 , 139, 10410-10418	16.4	64
471	Labile sulfates as key components in active sulfated zirconia for n-butane isomerization at low temperatures. <i>Journal of Catalysis</i> , 2004 , 227, 130-137	7.3	64
470	Hydrogenation of tetralin on silica/alumina-supported Pt catalysts I. Physicochemical characterization of the catalytic materials. <i>Journal of Catalysis</i> , 2007 , 251, 485-496	7.3	63
469	Comparison of zeolites LaX and LaY as catalysts for isobutane/2-butene alkylation. <i>Applied Catalysis A: General</i> , 2008 , 336, 89-100	5.1	63
468	Bulk and Al ₂ O ₃ -supported Ni ₂ P and MoP for hydrodeoxygenation of palmitic acid. <i>Applied Catalysis B: Environmental</i> , 2016 , 180, 301-311	21.8	62
467	Support effects in the aqueous phase reforming of glycerol over supported platinum catalysts. <i>Applied Catalysis A: General</i> , 2012 , 431-432, 113-119	5.1	62
466	On the formation of the acid sites in lanthanum exchanged X zeolites used for isobutane/cis-2-butene alkylation. <i>Microporous and Mesoporous Materials</i> , 2005 , 83, 309-318	5.3	62
465	Electrocatalytic Hydrogenation of Biomass-Derived Organics: A Review. <i>Chemical Reviews</i> , 2020 , 120, 11370-11419	68.1	62
464	Anharmonicity and Confinement in Zeolites: Structure, Spectroscopy, and Adsorption Free Energy of Ethanol in H-ZSM-5. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 7172-7182	3.8	62
463	Critical role of formaldehyde during methanol conversion to hydrocarbons. <i>Nature Communications</i> , 2019 , 10, 1462	17.4	61
462	Acetic Acid Reforming over Rh Supported on La ₂ O ₃ /CeO ₂ /ZrO ₂ : Catalytic Performance and Reaction Pathway Analysis. <i>ACS Catalysis</i> , 2013 , 3, 1919-1928	13.1	61

461	Adsorption of hydrogen sulfide on ZSM 5 zeolites. <i>The Journal of Physical Chemistry</i> , 1992 , 96, 2230-2235		61
460	Rh(CAAC)-Catalyzed Arene Hydrogenation: Evidence for Nanocatalysis and Sterically Controlled Site-Selective Hydrogenation. <i>ACS Catalysis</i> , 2018 , 8, 8441-8449	13.1	60
459	Liquid phase hydrogenation of crotonaldehyde over Pt/SiO ₂ catalysts. <i>Applied Catalysis A: General</i> , 1997 , 163, 111-122	5.1	60
458	Direct production of naphthenes and paraffins from lignin. <i>Chemical Communications</i> , 2015 , 51, 17580-3	5.8	59
457	Understanding the impact of aluminum oxide binder on Ni/HZSM-5 for phenol hydrodeoxygenation. <i>Applied Catalysis B: Environmental</i> , 2013 , 132-133, 282-292	21.8	59
456	Impact of Forming and Modification with Phosphoric Acid on the Acid Sites of HZSM-5. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 15763-15770	3.8	59
455	Sulfur-Tolerant Pt-Supported Zeolite Catalysts for Benzene Hydrogenation. <i>Journal of Catalysis</i> , 2001 , 201, 60-69	7.3	59
454	Ni ₃ P as a high-performance catalytic phase for the hydrodeoxygenation of phenolic compounds. <i>Green Chemistry</i> , 2018 , 20, 609-619	10	58
453	Acidic and basic sites of main group mixed metal oxides. <i>Materials Chemistry and Physics</i> , 1988 , 18, 577-593	1.4	58
452	Mechanistic features of the ethane oxidative dehydrogenation by in situ FTIR spectroscopy over a MoO ₃ /Al ₂ O ₃ catalyst. <i>Applied Catalysis A: General</i> , 2004 , 264, 73-80	5.1	57
451	Interaction of Methanol with Alkali Metal Exchanged Molecular Sieves. 1. IR Spectroscopic Study. <i>Journal of Physical Chemistry B</i> , 2000 , 104, 8624-8630	3.4	57
450	Coadsorption of toluene and methanol on HZSM-5 zeolites. <i>The Journal of Physical Chemistry</i> , 1991 , 95, 3736-3740		57
449	On the location, strength and accessibility of Brønsted acid sites in hierarchical ZSM-5 particles. <i>Catalysis Today</i> , 2012 , 198, 3-11	5.3	56
448	Metal organic frameworks based on Cu ²⁺ and benzene-1,3,5-tricarboxylate as host for SO ₂ trapping agents. <i>Comptes Rendus Chimie</i> , 2005 , 8, 753-763	2.7	56
447	Electrocatalytic Hydrogenation of Phenol over Platinum and Rhodium: Unexpected Temperature Effects Resolved. <i>ACS Catalysis</i> , 2016 , 6, 7466-7470	13.1	56
446	Influence of Hydronium Ions in Zeolites on Sorption. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 3450-3455	16.4	56
445	Well-Defined Rhodium-Gallium Catalytic Sites in a Metal-Organic Framework: Promoter-Controlled Selectivity in Alkyne Semihydrogenation to E-Alkenes. <i>Journal of the American Chemical Society</i> , 2018 , 140, 15309-15318	16.4	56
444	Effect of Location and Distribution of Al Sites in ZSM-5 on the Formation of Cu-Oxo Clusters Active for Direct Conversion of Methane to Methanol. <i>Topics in Catalysis</i> , 2016 , 59, 1554-1563	2.3	55

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- 442 On the Enhanced Selectivity of HZSM-5 Modified by Chemical Liquid Deposition. *Topics in Catalysis*, **2003**, 22, 101-106 2.3 55
- 441 In Situ IR spectroscopic study of the surface species during methylation of toluene over HZSM-5. *Journal of Catalysis*, **1991**, 132, 244-252 7.3 55
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- 437 Solvent-determined mechanistic pathways in zeolite-H-BEA-catalysed phenol alkylation. *Nature Catalysis*, **2018**, 1, 141-147 36.5 53
- 436 Integrated catalytic and electrocatalytic conversion of substituted phenols and diaryl ethers. *Journal of Catalysis*, **2016**, 344, 263-272 7.3 53
- 435 Synthesis of highly active sulfated zirconia by sulfation with SO₃. *Journal of Catalysis*, **2006**, 238, 39-45 7.3 53
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